

ROOF MOUNTED SOLAR WATER HEATING SYSTEMS

Building permit must be obtained by the owner of the property, acting as the building contractor, or by a building contractor. Separate Plumbing, Mechanical and Electrical permits are required.

Note:

1. Homeowners, with proof of homestead, may obtain a plumbing permit.
2. A licensed electrician and a mechanical contractor registered with the City of Mansfield must obtain any necessary electrical and mechanical permits.

FEES:

1. Plan review fee is \$45,
2. Permit fee is based on the total value of all construction work for which the permit is issued, and
3. Other fees as applicable based on the City of Mansfield permit fee schedule available on the city web site @ <http://www.mansfield-tx.gov>.

SUBMITTAL REQUIREMENTS:

Sufficient information must be submitted to deem compliance with the adopted 2006 International Residential Code and applicable ordinances. Additional information may be requested to determine compliance.

- ☐ **A COMPLETED RESIDENTIAL/COMMERCIAL BUILDING PERMIT APPLICATION.** Application is available on our web site at www.mansfield-tx.gov/ or at the Development Services front counter.
- ☐ A report from a licensed professional engineer will be required noting that a structural site assessment of the roof was performed, indicating type of roof, roof covering, number of roof covering layers, and provide with the report a roof plan noting location of all roof mounted collectors, existing roof framing and any proposed elements or alterations needed along panel support and bracing systems. Side elevations and mounting details of all roof mounted solar energy collectors. The collectors and supporting structure are required to be constructed of non-combustible materials or fire-retardant-treated wood if mounted on or above roof.
- ☐ Solar Collectors and other system components are required to be listed and labeled by an approved national recognized agency. Provide data specification sheet for solar collector, water heater/storage tanks. Solar collector data sheet must include the manufacturer's name, model number, serial number, collector weight, collector maximum allowable temperatures and pressures, and the type of heat transfer fluids that are compatible with the collector.
- ☐ **SCALED AND DIMENSIONED PLANS WHICH INCLUDES:**
 - A. A site plan,
 - B. A roof plan, side elevations of collectors and mounting details as required above with the engineer's report. Also, note compliance with local wind loading requirements 90 MPH (3-sec-gust/75 fastest mile).
 - C. Plans and specifications reflecting the scope of work and installation of the system including system components.
 - D. Note on plans location of all controls, dampers, fans, blowers, pumps, storage tank, valves, expansion tanks and proposed access for inspection, maintenance, repair and replacement.
 - E. One line system diagram that includes:
 - a. Piping materials
 - b. Water heater/storage tank, and capacity as noted on the data specification sheet.
 - c. Identify the heat transfer fluid (air, water, ethylene or propylene glycol, etc.)
 - d. Backflow protection (RPZ), expansion tank, temperature limiting control set to 180 degrees.

NOTE:

1. Local planning and zoning regulations involving such requirements as setback, height limitations, color, reflectivity or other design considerations, may apply. Contact the Planning Department for further information.
2. Replacement of solar domestic water heating systems shall be treated the same as a water heater replacement through a plumbing permit.